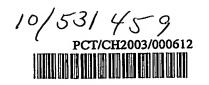
### PATENT COOPERATION TREATY



# **PCT**

# INTERNATIONAL PRELIMINARY EXA

anslation	PATENT COOPEI	CT Per	A PERSON I	53/45 PCT/CH2003/0
INTERNAT	IONAL PRELIMINA (PCT Article 3		ATION REPORT	
Applicant's or agent's file reference	FOR FURTHER ACT	See Notific	cation of Transmitte	
154906.1/Le/mb  International application No.	International filing date	Fielilianary	Examination Report (F  Priority date (day/mo	
PCT/CH2003/000612	10 September 200		•	
G06N 3/04, 3/08, G06F 17/60 Applicant	SWISS REINSURA	NCE COMPANY	7	
This report is also accompa amended and are the basis in 70.16 and Section 607 of the These annexes consist of a	for this report and/or sheets ne Administrative Instruction	containing rectifications	on, claims and/or draw ations made before thi	ings which have bee s Authority (see Rul
3. This report contains indications re		ns:		
I Basis of the report	t			
	nt of opinion with regard to	novelty, inventive s	tep and industrial appli	cability
IV Lack of unity of in	nvention			
v Reasoned stateme	ent under Article 35(2) with lanations supporting such s	n regard to novelty, in tatement	nventive step or industr	ial applicability;
VI Certain document	ts cited			
VII Certain defects in	the international application	on		
VIII Certain observation	ons on the international app	plication		
- 34				
Date of submission of the demand		Date of completion	of this report	
19 June 2004 (19.06	5.2004)	03 D	ecember 2004 (03.	.12.2004)
Name and mailing address of the IPEA/E	iP	Authorized officer		
Facsimile No.		Telephone No.		

International application No.

PCT/CH2003/000612

#### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

I. Basis of the report						
1. With	regard to	the elements of the international application:*				
	the inter	mational application as originally filed				
$\overline{\boxtimes}$	the desc	cription:				
	pages	1-28	, as originally filed			
	pages		, filed with the demand			
	pages	, filed with the letter of				
$\nabla$	the clair		·			
KZ	pages	•	, as originally filed			
	pages .	, as amended (togethe				
	pages	,	, filed with the demand			
	pages	1-23 , filed with the letter of				
		, 1100 1111 111 111 111				
M	the drav	-	as originally filed			
	pages		, as originally filed			
	pages	, filed with the letter of				
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	the seque	nce listing part of the description:				
	pages					
	pages					
	pages	, filed with the letter of	<del></del>			
the i	nternation se elemen		which is:			
▎႘		guage of a translation furnished for the purposes of international search (under F	(uie 23.1(0)).			
	the language of publication of the international application (under Rule 48.3(b)).					
	or 55.3					
3. Wit	h regard iminary e	to any nucleotide and/or amino acid sequence disclosed in the internexamination was carried out on the basis of the sequence listing:	ational application, the international			
	contai	ned in the international application in written form.				
	filed to	ogether with the international application in computer readable form.				
	furnished subsequently to this Authority in written form.					
	furnisl	ned subsequently to this Authority in computer readable form.				
		tatement that the subsequently furnished written sequence listing does national application as filed has been furnished.	ot go beyond the disclosure in the			
	•	tatement that the information recorded in computer readable form is identically included.	al to the written sequence listing has			
4.	The a	mendments have resulted in the cancellation of:				
	П	the description, pages				
	Ħ	the claims, Nos.				
1	Ħ	the drawings, sheets/fig				
5.	This re	eport has been established as if (some of) the amendments had not been made, if the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	since they have been considered to go			
in t	lacement his report 170.17).	sheets which have been furnished to the receiving Office in response to an invert as "originally filed" and are not annexed to this report since they do	itation under Article 14 are referred to not contain amendments (Rule 70.16			
** Any	replacen	nent sheet containing such amendments must be referred to under item I and an	nexed to this report.			
1						

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V.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
	citations and explanations supporting such statement

1.	Statement			
	Novelty (N)	Claims	1-23	YES
		Claims		NO
	Inventive step (IS)	Claims	1-23	YES
		Claims		NO
	Industrial applicability (IA)	Claims	1-23	YES
		Claims		NO

- 2. Citations and explanations
  - This report makes reference to the following document:

D1: US-A-5 761 442 (BARR DEAN S ET AL) 2 June 1998 (1998-06-02)

- Novelty and inventive step (PCT Article 33(2) and
   (3))
- 2.1 D1, which is considered to represent the prior art closest to the subject matter of claim 1, discloses (the references in parentheses are to this document):

Computer-aided system for determining future development values, wherein the system for determining development values comprises at least one neural network and historic development values are used to forecast future development values (column 4, line 20-42).

The subject matter of claim 1 thus differs from the system known from D1 in that the system specified in claim 1 is suitable for establishing experience

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ratings and risk reserves and comprises iteratively generated neural networks for each time interval in order to determine the future development values of an event, wherein each successive neural network depends recursively on the preceding neural network.

The subject matter of Claim 1 is therefore novel (PCT Article 33(2)).

The problem addressed by the present invention may therefore be considered that of providing a means of forecasting the future development values of an event generally accurately over a substantial period.

The solution to this problem proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)). The reasons are: the prior art neither discloses nor suggests the iterative generation of neural networks for the purpose of forecasting future values.

- 2.2 Claims 2-6 are dependent on claim 1 and therefore likewise meet the PCT requirements for novelty and independent step.
- 2.3 The same reasoning applies to the corresponding independent process and computer program product claims 7, 17 and 23 and to claims 8-12 and 18-22, which are dependent on claims 7 and 17.
- 2.4 The combination of features contained in independent claims 13 and 15 and in claims 14 and 16, which are dependent thereon, is neither known from nor suggested by the available prior art. Said claims

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therefore appear to meet the PCT requirements for
novelty and inventive step.